

- (c) communicating the outputted unit to the subscriber according to the programming schedule; and
- (d) logging the communication of said outputted unit based on information or data provided by the signal detector.

85. The method of claim 38, further comprising the step of identifying a specific one of said at least one received unit of television programming on the basis of a unit identification signal embedded in said at least one received unit of television programming.

II. REMARKS

A. Introduction

The Office Action dated August 4, 1998 has been carefully reviewed and the foregoing amendments made in response thereto.

Claims 10, 38, 78, 79, and 83 are amended. Claims 2, 3, 5, 7-11, 13, 16-20, 22, 23, 31-40, 42, 44, and 49-85 are pending in the application.

Claims 10, 11, 13, 16-19, 40, 42, 44, 49-52, and 82 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim 10 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 10, 40, 42, 56, 62, 63, 83, and 84 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over "An Automated Programming Control system for Cable TV," by Beck et al., hereinafter Beck.

Claim 2, 3, 5, 8-11, 13, 16, 18, 19, 49, 50-52, 56-71, 75-78, and 80-84 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over USP 4,025,851 to Haselwood, hereinafter

Haselwood '851 in view of "The Automation of Small Television Stations, " by Young et al., hereinafter Young.

Claim 7 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Haselwood '851 in view of Young, further in view of "Microprocessor for CATV Systems," by Tunmann et al., hereinafter Tunmann.

Claims 20, 22, and 23 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Haselwood '851 in view of Young, further in view of JP 56-1161 to Kamishima, hereinafter Kamishima.

Claim 31, 50, 51, 53, 55, and 82 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Haselwood '851 in view of Young and "The Digitrol 2 Automatic VTR Programme Control," by Skilton, hereinafter Skilton, further in view of Kamishima.

Claims 2, 3, 5, 8-11, 13, 19, 31, 50-52, 53, 55-71, 75-78, and 80-84 rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tunmann in view of Young and Skilton.

Claim 16 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tunmann in view of Young, Skilton, and Haselwood '851.

Claims 31-35, 39, 72-74, 81, and 82 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over 74,619 to Hetrich, hereinafter Hetrich in view of Young.

Claims 31, 65, 78, and 79 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Young in view of UK 959,274 to Germany, hereinafter Germany.

Claims 2-16, 18-35, 37-53, and 55-84 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Young and Germany, further in view of Hetrich.

Claims 36-38, 54, and 85 are not rejected over the prior art of record.

Claims 2, 3, 5, 7-11, 13, 16-20, 22, 23, 31-40, 42, 44, and 49-85 remain active in this application. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

B. Response to Requirement Imposed Upon Applicants to Resolve Alleged Conflicts Between Applicants' Applications.

Applicants respectfully traverse the requirements of the Office Action paragraph 5.

Paragraph 5 of the Office Action requires Applicants to either:

- (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; or
- (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or
- (3) resolve all conflicts between claims in the related 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications.

In addition, Examiner states that failure to comply with any one of these requirements will result in abandonment of the application.

Examiner states that the requirement has been made because conflicts exist between claims of the related co-pending applications, including the present application. Examiner sets forth only the serial numbers of the co-pending applications without an indication of which claims are conflicting. Examiner has also attached an Appendix providing what is deemed to be clear evidence that conflicting claims exist between the 328 related co-pending applications and the present application. Further, Examiner states that an analysis of all claims in the 328 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

Applicants respectfully traverse these requirements in that Examiner has both improperly imposed the requirements, and has incorrectly indicated that abandonment will occur upon failure to comply with the requirement. Applicants' traversal is supported by the fact that 37 C.F.R. § 1.78 (b) does not, under the present circumstances, provide Examiner with authority to require Applicants to either: 1) file terminal disclaimers; 2) file an affidavit; or 3) resolve all apparent conflicts. Additionally, the penalty of abandonment of the instant application for failure

to comply with the aforementioned requirement is improper for being outside the legitimate authority to impose abandonment upon an application. The following remarks in Section (B) will explain Applicants' basis for this traversal.

1. The PTO's New Requirement is an Unlawfully Promulgated Substantive Rule Outside the Commissioner's Statutory Grant of Power

The PTO Commissioner obtains his statutory rulemaking authority from the Congress through the provisions of Title 35 of the United States Code. The broadest grant of rulemaking authority -- 35 U.S.C. § 6 (a) -- permits the Commissioner to promulgate regulations directed only to "the conduct of proceedings in the [PTO]". This provision does NOT grant the Commissioner authority to issue substantive rules of patent law. Animal Legal Defense Fund v. Quigg, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).¹ Applicants respectfully submit that the Examiner's creation of a new set of requirements based upon 37 CFR § 1.78(b) constitutes an unlawful promulgation of a substantive rule in direct contradiction of a long-established statutory and regulatory scheme.

2. The PTO's Requirement is a Substantive Rule

The first determination is whether the requirement as imposed by the PTO upon Applicants is substantive or a procedural rule. The Administrative Procedure Act offers general guidelines under which all administrative agencies must operate. A fundamental premise of administrative law is that administrative agencies must act solely within their statutory grant of power. *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). The PTO Commissioner has NOT been granted power to promulgate substantive rules of patent law. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).

¹Accord *Hoechst Aktiengesellschaft v. Quigg*, 917 F.2d 522, 526, 16 USPQ2d 1549, 1552 (Fed. Cir. 1990); *Glaxo Operations UK Ltd. v. Quigg*, 894 F.2d 392, 398-99, 13 USPQ2d 1628, 1632-33 (Fed. Cir. 1990); *Ethicon Inc. v. Quigg*, 849 F.2d 1422, 1425, 7 USPQ2d 1152, 1154 (Fed. Cir. 1988).

The appropriate test for such a determination is an assessment of the rule's impact on the Applicants' rights and interests under the patent laws. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1215 (D.D.C. 1995). As the PTO Commissioner has no power to promulgate substantive rules, the Commissioner receives no deference in his interpretation of the statutes and laws that give rise to the instant requirement. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). When agency rules either (a) depart from existing practice or (b) impact the substantive rights and interests of the effected party, the rule must be considered substantive. *Nat'l Ass'n of Home Health Agencies v. Scheiker*, 690 F.2d 932, 949 (D.C. Cir. 1982), *cert. denied*, 459 U.S. 1205 (1983).

a. The PTO Requirement is Substantive Because it Radically Changes Long Existing Patent Practice by Creating a New Requirement Upon Applicants Outside the Scope of 37 C.F.R. § 1.78 (b)

The Examiner's requirement is totally distinguishable from the well articulated requirement authorized by 37 CFR § 1.78 (b), because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective double patenting rejection without the PTO's affirmative double patenting rejection of the claims. Long existing patent practice recognizes only two types of double patenting, double patenting based on 35 U.S.C. § 101 (statutory double patenting) and double patenting analogous to 35 U.S.C. § 103 (the well-known obviousness type double patenting).² These two well

²MPEP § 804(B)(1) states, in an admittedly awkward fashion, that the inquiry for obviousness type double patenting is analogous to a rejection under 35 U.S.C. 103: "since the analysis employed in an obvious-type double patenting determination parallels the guidelines for a 35 U.S.C. 103 rejection, the factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obvious-type double patenting analysis".

established types of double patenting use an objective standard to determine when they are appropriate³ and have a determinable result on the allowability of the pending claims.

The Examiner's new requirement represents a radical departure from long existing patent practice relevant to conflicting claims between co-pending applications of the same inventive entity. Two well established double patenting standards are based on an objective analysis of comparing pending and *allowed* claims. However, in the present application, there are no *allowed* claims. The Examiner's new requirement to avoid a double patenting rejection presumes that conflicts exist between claims in the present application and claims in the 327 copending applications. This presumption of conflicts between claims represents a radical departure from long existing patent practice as defined by 37 C.F.R. § 1.78 (b), which states:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Clearly, the only requirement authorized by the rule is the elimination of conflicting claims from all but one application where conflicting claims have been determined to exist. Furthermore, in order to determine that conflicting claims do in fact exist in multiple applications, the only possible analysis is obviousness-type double patenting, since there are no allowed or issued claims by which to employ the 35 U.S.C. § 101 statutory double patenting analysis. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

In summary, the Examiner's new requirement departs from long-established practice because it (1) creates and imposes a new requirement to avoid abandonment of the application

³ The objective test for same invention double patenting is whether one of the claims being compared could be literally infringed without literally infringing the other. The objective test for obviousness type double patenting is the same as the objective nonobviousness requirement of patentability with the difference that the disclosure of the first patent may not be used as prior art.

based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective double patenting rejection without the PTO's affirmative double patenting rejection of the claims.

Therefore, the Examiner's new requirement departs from existing practice and therefore is a **substantive rule** beyond the authority of the PTO and is therefore, invalid.

**b. The New Requirement is Also a Substantive Rule
Because it Adversely Impacts the Rights and
Interests of Applicants to Benefits of the Patent**

The rights and benefits of a U.S. patent is solely a statutory right. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996). The essential statutory right in a patent is the right to exclude others from making, using and selling the claimed invention during the term of the patent. Courts have recognized that sometimes new procedural rules of the PTO are actually substantive rules, e.g. when the new rule made a substantive difference in the ability of the applicant to claim his discovery. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1214 (D.D.C. 1995) (emphasis added), citing, *In re Pilkington*, 411 F.2d 1345, 1349; 162 USPQ 145 (CCPA 1969); and *In re Steppan*, 394 F.2d 1013, 1019; 156 USPQ 143 (CCPA 1967).

The new requirement, on its face and as applied here, is an instance of a PTO rule making a substantive difference in Applicants' ability to claim their invention and, therefore, must be considered a substantive rule. The requirement denies Applicants rights and benefits expressly conferred by the patent statute. The measure of the value of these denied rights and benefits is that the requirement, as applied here, would deny Applicants the full and complete PTO examination of Applicants' claims on their merits, as specified by 37 C.F.R. § 1.105. In addition, to file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications based on the PTO's incomplete examination on the merits would deny Applicants the benefit of the full patent term of 17 years on each of Applicants' respective applications. Applicants respectfully submit that the requirement has a huge impact on their rights and interests in the presently claimed invention.

c. Conclusion: Substantive Rule

In summary, the requirement is a change to long existing practice and/or has a substantive impact on the rights and interests of Applicants to their invention. Either finding means that the new requirement is a substantive rule. Since the Commissioner has no power to issue substantive rules, the requirement is an improperly promulgated substantive rule having no force of law.

3. The PTO Requirement is Outside the Scope of 37 C.F.R. § 1.78 (b)

Rule 78 (b) states that:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

The only **requirement** that Rule 78 (b) authorizes is the elimination of conflicting claims from all but one co-pending applications.

In the instant Office Action, Examiner has not required the elimination of all conflicting claims from all but one application, but instead has required Applicants to: 1) file terminal disclaimers in each of the related 328 applications; 2) provide an affidavit; or 3) resolve all conflicts between claims in the related 328 applications. None of the options in the requirement is authorized by Rule 78 (b), and therefore Applicants respectfully submit that such a requirement is improper.

With respect to the PTO's authority to act within Rule 78 (b) regarding the rejection of conflicting claims, MPEP § 822.01 states that:

Under 37 CFR § 1.78 (b), the practice relative to overlapping claims in applications copending before the examiner..., is as follows: Where claims in one application are unpatentable over claims of another application of the same inventive entity because they recite the same invention, *a complete examination should be made of the claims of each application* and all appropriate rejections should be entered in each application, including rejections based upon prior art. *The claims of each application may also be rejected on the grounds of **provisional** double patenting on the claims of the other application* whether or not any claims

avoid the prior art. Where appropriate, the same prior art may be relied upon in each of the applications. MPEP 822.01 (6th Ed., Rev. 3, 1997), (*emphasis added*).

In light of the requirement of the Office Action, MPEP § 822.01 and 37 CFR § 1.78 (b) are not applicable since there has not been any rejection with regard to the elimination of conflicting claims from all but one co-pending application.

4. The Assertion That Failure to Comply with the Requirement Will Result in Abandonment of Applicants' Application is Improper

Applicants' prospective failure to comply with the above requirements cannot properly result in abandonment of the present application. Applicants respectfully submit that abandonment of an application can properly occur only:

- (1) for failure to respond within a provided time period (under Rule 135);
- (2) as an express abandonment (under Rule 138); or
- (3) the result of failing to timely pay the issue fee (under Rule 316).

There is no provision in the rules permitting abandonment for failure to comply with any of the presented requirements. To impose an improper requirement upon Applicants and then hold the application is to be abandoned for failure to comply with the improper requirement violates the rules of practice before the USPTO. Furthermore, Examiner is in effect attempting to create a substantive rule which is above and beyond the rulemaking authority of the USPTO, and therefore is invalid.

In the *Application of Mott*, 539 F.2d 1291, 190 USPQ 536 (CCPA 1976), the applicant had conflicting claims in multiple applications. The CCPA held that action by the Examiner which would result in automatic abandonment of the application was legally untenable. *Id.* at 1296, 190 USPQ at 541. In the present application, Examiner has asserted that there are conflicting claims in multiple applications, and that non-compliance of the Office Action's requirement will result in an automatic abandonment. Therefore, under *Mott's* analysis, the Office Action's result of abandonment of Applicants' application is legally untenable.

5. Response to Apparent Conflict of Claims

Applicants submit that the presentation of the Office Action Appendix fails to demonstrate any conflicts between claims of the present application and claims of the co-pending applications. Rather, the Office Action Appendix compares representative claims of *other* applications in attempt to establish that “conflicting claims exist between the 328 related co-pending applications.” Absent any evidence of conflicting claims between the Applicants’ present application and any other of Applicants’ co-pending applications, any requirement imposed upon Applicants to resolve such alleged conflicts is improper.

6. Request for Withdrawal of Requirement

Therefore, Applicants respectfully request that Examiner reconsider and withdraw the requirement that Applicants: (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or (3) resolve all conflicts between claims in the above identified 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications, which upon failing to do so will abandon the application.

7. Filing of Supplemental Oath

Notwithstanding the foregoing, Applicants will file a supplemental oath under 37 C.F.R. § 1.67 for each application when Examiner identifies allowable subject matter. Applicants respectfully propose that the filing of individual supplemental oaths attesting to the absence of claim conflicts between previously patented claims and subsequently allowed claims is a more reasonable method of ensuring the patentable distinctness of subsequently allowed claims.

Under 37 C.F.R. § 1.105, § 1.106 & § 1.78 (b), Examiner has the duty to make every applicable rejection, including double patenting rejection. Failure to make every proper rejection denies Applicants all rights and benefits related thereto, e.g., Applicants’ right to appeal, etc.

Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

C. Information Disclosure Statement

The Applicants appreciate the Examiner's review of the Information Disclosure Statements filed 2/1/94, 6/6/94, 6/16/94, 2/17/95, 5/11/95, 1/4/96, 1/19/96, 6/5/96 (4/5/96) and have addressed those specific concerns raised in paragraph 8 of the Office Action. It is the Applicants' understanding that the Examiner is concerned about the reasons for such a large number of references cited. Applicants contend that the reason that the Applicants submitted such a large number of references in the Information Disclosure Statements was that a large portion of the information cited by the Applicants was brought to the Applicants' attention in the discovery processes in a previous litigation in the United States District Court for the Eastern District of Virginia (*Personalized Mass Media Corp. v. The Weather Channel, Inc.* Docket No. 2:95 cv 242) and an investigation by the International Trade Commission (*In the Matter of Certain Digital Satellite System (DSS) Receivers And Components Thereof*, No. 337 TA 392, which was direct to U.S. Pat. No. 5,335,277) regarding claims in the Applicants' related issued patents. The documents listed in the Information Disclosure Statement were cited during the previous litigation/investigative proceedings by the alleged infringers in the aforementioned proceedings as being relevant and material to patentability of the claims in the related patents. The Applicants submitted those materials in the Information Disclosure Statement to the PTO at the earliest possible time in order to file them in compliance with the 3 month requirement stated in the certification used to submit the Information Disclosure Statement before the Office Action was issued as is necessary under 37 CFR § 1.97 (c) (1). In such haste, entries were inadvertently submitted which do not appear on their face to be material to the patentability of the present application. Applicants have corrected this error with the submission of the corrected Information Disclosure Statement as shown in Appendix B. However, it is the Applicants'

understanding that not all references cited must be material to patentability in order for such references to be considered. In § 609 of the MPEP, it states,

“[t]hese individuals also may want the Office to consider information for a variety of reasons: e.g., without first determining whether the information meets any particular standard of materiality, or because another patent office considered the information to be relevant in a counterpart or related patent application filed in another country, or to make sure that the examiner has an opportunity to consider the same information that was considered by the individuals that were substantially involved in the preparation or prosecution of a patent application.”

Applicants’ position is that information that was considered material in previous litigation would fall into the ‘variety of reasons’ category as stated above. Applicants intention was not to confuse or make difficult the examination process for the Examiner, but was instead to be forthright and open in disclosing all information deemed to be relevant to the application in issue by third parties.

D. Response to Rejections under 35 U.S.C. § 112

1. Specification Support of Claims

Paragraph 8 of the Office Action rejects the claims under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

With respect to claims 10, 11, 13, 16, 17, 18, 19, 49-52, and 82:

A careful search of claims 10, 11, 13, 16, 17, 18, 19, 49-52, and 82 has failed to reveal the terms "data signal" or "data signals" in any of these claims.

With respect to claims 40, 42, 44, 49-52, and 82:

A) At col. 11 lines 38-44, U.S. Pat. No. 4,694,490 states (emphasis added):

By comparing **identification signals on the incoming programing** with the **programing schedule** received earlier from local input, 74, and/or from a remote site via network, 98, controller/computer, 73, can determine when and on what **channel or channels** the head end facility **should transmit** the programing.

- B) With respect to an example of a received control signal, please see col. 11 lines 3-6 (emphasis added):

Signal processor, 71, has means, described above, to identify and separate the **instruction** and information **signals** from their associated programing and pass them,

The Applicants note that the actual language of claim 40 is "inputting said control signal together with information designating one of" and cite as one such example col. 11 lines 3-7 (emphasis added):

Signal processor, 71, has means, described above, to identify and separate the instruction and information signals from their associated programing and pass them, **along with information identifying the channel** source of each signal, externally to code reader, 72.

The passages of the '490 patent at col. 4 lines 5-13 and col. 15 line 57 through col. 16 line 2 are also pertinent. The passage at col. 11 lines 38-44, which is printed above, discloses a received programming schedule, and col. 11 lines 21-31 is also pertinent.

As an example of the method of controlling recited in claim 40, please see col. 11 lines 32-57 (emphasis added):

By means of the signals, with channel indicators, received from code reader, 72, **controller/computer, 73, can determine** what specific programing and programing unit has been received by each receiver, 53 through 62, and is passing in line on each individual wire to matrix switch, 75.

By comparing identification signals on the incoming programming with the programming schedule received earlier from local input, 74, and/or from a remote site via network, 98, **controller/computer, 73, can determine** when and on what channel or channels the head end facility should transmit the programing.

Controller/computer, 73, has means for communicating control information with matrix switch, 75, and video recorder/players, 76 and 78. If incoming programing is meant for immediate transmission, controller/computer, 73, instructs matrix switch, 75, to configure its switches so as to transfer incoming programing to the proper output channel. For example, if controller/computer, 73, **determines** that programing incoming via receiver, 53, should be transmitted immediately to the field distribution system, 93, via cable channel modulator, 87, controller/computer, 73, **instructs matrix switch, 75, to configure its switches so as to transfer**

programing transmissions inputted from TV receiver, 53, to the output that leads to modulator, 87.

C) As regards the Examiner's question of "1) an output channel was identified in response to receiving the recited control signal and the recited inputted information," Applicants call the Examiner's attention to col. 11 lines 3-7 (which is printed above) for a disclosed example of "the recited control signal and the recited inputted information" with col. 11 lines 32-37 (emphasis added):

By means of the signals, with channel indicators, received from code reader, 72, **controller/computer, 73, can determine** what specific programing and programing unit **has been received by each receiver, 53** through 62, and **is passing in line on each individual wire to** matrix switch, 75.

Another example is provided by the passage at col. 11 lines 38-44 (emphasis added):

By comparing **identification signals on the incoming programing** with the **programing schedule** received earlier from local input, 74, and/or from a remote site via network, 98, controller/computer, 73, can determine when and on what **channel or channels** the head end facility **should transmit** the programing.

As regards the Examiner's question of "2) an output channel was also designated via the received programming schedule", please see col. 11 lines 21-31 (emphasis added):

The controller/computer, 73, has means for receiving input information from local input, 74, and from remote sources via telephone or other data transfer network, 98. Such input information might include the cable television system's complete **programing schedule**, with each discrete unit of programing identified with a unique program code (which in the case of advertising might be a purchase order number). Such input information might also indicate when and **where the cable head end facility should expect to receive** the programing. Such input information might also indicate when **and on which channel or channels the head end facility should transmit** each program unit to cable field

distribution system, 93.

Applicants respectfully submit that the claims of the subject application particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the

art would understand the bounds of the patent claim when read in light of the specification, and if the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. *Credle v. Bond*, 25 F.3d 1556, 30 USPQ2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994). Applicants have amended the claims to enhance clarity and respectfully submit that all pending claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter.

Applicants believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. 112, first and second paragraph, and respectfully request withdrawal of these rejections. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

E. Response to Obviousness Rejection of Claims

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all the claim recitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 706.02(j).

1. Summary of Prior Art

a. Beck

Beck teaches programming control for a cable television system. An on-line automation system is the day-to-day, active operating system providing control of video switching and machine functions in accordance with the daily program schedule. The program schedule is prepared by a disc preparation system and stored on a floppy diskette, which is the input for the on-line automation system. An operator places the program schedule diskette into the automatic system disc transport and types start. The system then proceeds to operate based on the program schedule diskette information and provides the required automatic switching and remote machine control. A program log is generated and consists of a listing of events as they actually occurred.

b. Haselwood '851

The office action introduces Haselwood '851 to allegedly teach a television broadcast environment including a network station, television stations, and a program source. Haselwood '851 teaches a monitoring system for monitoring broadcasts of various network affiliates. A network program originates from a television camera 10 and is combined with coding information at mixing point 14, wherein the coding information includes a real-time indicative signal, data identifying the source of the program and the program itself, and a reference phase signal, a start of message signal, and parity bits. The combined video signal is applied to a network feed line 16 to be fed to network outlet 18 to applied directly to a transmitter 42 at outlet 18 for radiation by an antennae 20 or to be recorded at outlet 18 for delayed broadcast. Network outlet 18 may also receive video information from local program source 44 including a television camera for live broadcasts, a flying spot scanner for showing movies, or a video tape recorder for playing back video taped information. Network outlet 18 broadcasts either network

programs as received from feed line 16 or local programs as received from local program source 44.

c. Tunmann

Tunmann teaches the used of a microprocessor to automate control of switching functions. A switching program is entered either locally or remotely, which allows automatic selection from a number of sources in a scheduled basis. Locally, an operator enters programming for each time slot. Remotely, encoders convert the switch commands to a VF signal that can be transmitted on a telephone line or a channel of the system. Further, Tunmann teaches polling the status of the elements which gives an indication of the current status for display on a CRT. The programming is also displayed on a CRT.

d. Hetrich

Hetrich is directed to a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The system in Hetrich includes a master station 10 having a program source 12 interconnected by a transmission system employing network lines 14 to individual member stations 16. The system superimposes control signals on the normal network audio program. These control signals are used to start and stop audio recorders to record special programs for later broadcast, to accomplish switching of local and network programs, or to interrupt programming for emergency announcements.

e. Young

Young has primarily been used in the office action because Young is directed to the automation of small television stations. The automation system includes a central processing unit having memory and logic sections. Data is fed into the system via a punch card reader or

keyboard. The information from the punch card includes true or elapsed time, video and audio sources, switching transitions, and other certain information. The data is stored in memory for display on a standard TV monitor. Every time an event is switched on air, each event in the memory advances and a new card is read in. The cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled on air time of events and the duration of the event in minutes and seconds. Manual control panels for the source machines and the audio/video switcher are connected in parallel with the output of the machine interface in order for the operator to take complete control by switching the mode of operation from automatic to manual. Young also speculates on future trends for easier automation installation which may eliminate unnecessary work and hardware. Young suggests coding films and tapes instead of the presently programmed punch cards with basis instructions including color or monochrome, magnetic or optical sound. Young also suggests using computers for checking or invalid data entries and conflicting instructions.

f. **Kamishima**

Kamishima has been cited by the office action for its monitoring feature. Kamishima teaches a monitoring device of a switcher system used in a TV station. A switcher selects video and sound signals based on control signals from a automatic program emitter. A program source code is applied to a portion of a video signal while a portion of the sound signal is also coded. The arithmetic unit 46 compares data from automatic program emitter with the source code and the coded portion of the audio signal. If there is no match, the system emits an alarm, prints an error report, and switches to a preliminary system.

g. Skilton

The office action relies on Skilton to allegedly teach automatic control systems which are used to automate the selection and transmission of TV programming. Skilton teaches an automatic microprocessor controlled VTR programmer used for playback and advertising insertion into satellite or broadcast programming. A control card is used to send and receive signals from the microprocessor for control purposes and send signals to an interval switcher to make the switch of video as necessary.

h. Germany

The office action relies on Germany to teach inserting cueing signals into network programming. Germany teaches the use of cueing signals to facilitate the insertion of local announcements, regional broadcasts, and alternative advertisements into different programs. Germany suggests transmitting a visible cue signal located in the picture area for manual control or each circuit will automatically trigger an appropriate control device to carry out the desired operation on receipt of the correct cue signal. The cue signals may be transmitted to operate monitoring circuits to control the switching on of a domestic appliance or a mechanism in prepayment television systems where a viewer inserts a coin into a meter to render a receiver operative

2. Response to Independent Claim Rejections

a. Claim 5

Claims 5 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 5**, Haselwood '851 fails to teach, *inter alia*, receiving at the computer a programming schedule, said programming schedule designating for at least one of said received units or said at least one stored unit at least one of: (a) an output channel to be used in communicating the at least one of said received units or said at least one stored unit to

said subscriber and (b) a time the at least one of said received units or said at least one stored unit is to be communicated to said subscriber and communicating at least one of said received units or said at least one stored unit from said station to said subscriber according to the programming schedule. Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to communicate programming to a subscriber.

With respect to Applicants' **claim 5**, Tunmann fails to teach, *inter alia*, storing at least one of said received units, wherein the units are received from a remote television programming source. Tunmann teaches selection of various satellite signals, but is silent as to storing the signals. Tunmann also teaches using a keyboard to input programming information to the memory. However, Tunmann is silent as to storing programming received from a remote source as claimed by Applicants.

Further, Tunmann fails to suggest or describe receiving at the computer a programming schedule, said programming schedule designating for at least one of said received units or said at least one stored unit at least one of: (a) an output channel to be used in communicating the at least one of said received units or said at least one stored unit to said subscriber and (b) a time the at least one of said received units or said at least one stored unit is to be communicated to said subscriber and communicating at least one of said received units or said at least one stored unit from said station to said subscriber according to the programming schedule. Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or

stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a programming schedule as well as communicating programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

With respect to Applicants' **claim 5**, Young fails to teach, *inter alia*, storing at least one of said received units, wherein the units are television programming that are received from a remote television programming source. Young instead teaches a memory for storing data retrieved from a card reader. There is no suggestion of storing television programming from a remote source.

Further, Young fails to suggest or describe receiving at the computer a programming schedule, said programming schedule designating for at least one of said received units or said at least one stored unit at least one of: (a) an output channel to be used in communicating the at least one of said received units or said at least one stored unit to said subscriber and (b) a time the at least one of said received units or said at least one stored unit is to be communicated to said subscriber and communicating at least one of said received units or said at least one stored unit from said station to said subscriber according to the programming schedule. Although Young teaches a log of programming, there is no suggestion of receiving at a computer a programming schedule per se. Instead, Young teaches that the cards read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air-time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for communicating programs to subscribers.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and communicating. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

b. Claim 10

Claims 10 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 10**, Beck fails to teach, *inter alia*, loading a plurality of prerecorded units of said television programming, to be communicated to said subscriber, onto a local programming source located at said intermediate transmission station and receiving a plurality of signals from a remote programming source, each of said signals designating one unit of said loaded units and said received units and identifying in response to each of said signals said one unit designated by said signal, the one unit being selected from: (a) the received units received at said station from the remote source and (b) the loaded units loaded onto the local source and said local programming source comprising a programming storage device located at said intermediate transmission station and communicating each said one unit to the subscriber

based on said step of identifying. Beck is completely silent as to an intermediate transmission station. The disclosure of Beck is directed to a cable television system, however Beck fails to describe any stations and Beck is especially silent as to any intermediate transmission station. Beck simply teaches using programming diskettes to control switching and machine functions of an on-line automation system. There is no teaching of preloaded programs that have incoming signals that designate the pre-loaded programs. Since, Beck is silent as to incoming signals that designate a unit of pre-loaded programs, Beck is utterly silent as to identifying in response to each of the incoming signals the unit of designated pre-loaded programs. Further, Beck fails to suggest or describe an intermediate station having a local programming source for receiving the signals that designate the pre-loaded programming.

With respect to Applicants' **claim 10**, Haselwood '851 fails to teach, *inter alia*, receiving a plurality of signals from a remote programming source, each of said signals designating one unit of said loaded units and said received units and identifying in response to each of said signals said one unit designated by said signal, the one unit being selected from: (a) the received units received at said station from the remote source and (b) the loaded units loaded onto the local source and communicating each said one unit to the subscriber based on said step of identifying. Although, Haselwood '851 receives a real-time indicative signal encoded on line 20 of the video signal so delayed broadcasts may be identified, there is no suggestion of any signal that also identify pre-loaded programming. In fact, the pre-loaded programming in Haselwood '851 is received from local program source 44 while the indicative signal is received encoded on a video signal from network outlet 18. Haselwood '851 is silent as to any signals that designate pre-loaded loaded programming and received programming in order to identifying one unit to communicate to a subscriber based on identifying as claimed by Applicants.

With respect to Applicants' **claim 10**, Tunmann fails to teach, *inter alia*, loading a plurality of prerecorded units of said television programming, to be communicated to said subscriber, onto a local programming source located at said station and receiving a plurality of signals from a remote programming source, each of said signals designating one unit of said

loaded units or said received units and said local source comprising a programming storage device located at said station and communicating each said one unit to the subscriber.

Tunmann is silent as to any intermediate transmission station. The disclosure of Tunmann is directed to a microprocessor for CATV systems, however Tunmann fails to describe any stations and is especially silent as to any intermediate transmission station. Tunmann is silent as to any specific system including an intermediate transmission station having a local programming source with a storage device. Tunmann is further silent as to receiving signals that designate received or loaded programming and communicated the designated unit to subscribers. Tunmann simply describes using microprocessors for selecting channels to distribute off-air signals.

With respect to Applicants' **claim 10**, Young fails to teach, *inter alia*, loading a plurality of prerecorded units of said television programming, to be communicated to said subscriber, onto a local programming source located at said intermediate transmission station and receiving a plurality of signals from a remote programming source, each of said signals designating one unit of said loaded units or said received units and said local source comprising a programming storage device located at said intermediate transmission station and communicating each said one unit to the subscriber. Young is silent as to any intermediate transmission station. The disclosure of Young is directed to a computer at a television station, however Young fails to describe any stations and is especially silent as to any intermediate transmission station. Young is silent as to any specific system including an intermediate transmission station for loading programming and having a local programming source with a storage device. Further, Young is silent as to receiving signals from a remote programming source for designating one unit of said loaded units or said received units.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a

network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed intermediate transmission station having a local programming source, which has a programming storage device and the functioning's of each. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

c. Claim 20

Claims 5 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 20**, Haselwood '851 fails to teach, *inter alia*, said computer having access to a programming schedule, the programming schedule designating for at least one unit of said received units or said stored units at least one of: (a) a time to communicate to the subscriber and (b) an output channel to be used for communicating to the subscriber and said computer selecting each of said at least one unit of said received units or said stored units designated by said programming schedule based upon said received signals and said stored signals, and said computer configuring said switch and controlling said storage device to communicate said selected units to the subscriber according to said programming schedule.

Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and

viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to select and communicate programming to a subscriber.

With respect to Applicants' **claim 20**, Young fails to teach, *inter alia*, said computer having access to a programming schedule, the programming schedule designating for at least one unit of said received units or said stored units at least one of: (a) a time to communicate to the subscriber and (b) an output channel to be used for communicating to the subscriber and said computer selecting each of said at least one unit of said received units or said stored units designated by said programming schedule based upon said received signals and said stored signals, and said computer configuring said switch and controlling said storage device to communicate said selected units to the subscriber according to said programming schedule.

Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for selecting and communicating programs to subscribers.

Further, in general, Kamishima, Germany, and Hetrich have been used as secondary references in various combinations with Haselwood '851 and Young. Kamishima teaches a monitoring device of a switcher system used in a TV station. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the

various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Haselwood '851 and Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and selecting and communicating programming based on the schedule. Therefore, combining the primary references with any one of Kamishima, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

d. Claim 31

Claims 5 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 31**, Haselwood '851 fails to teach, *inter alia*, receiving a programming schedule designating for said received at least one unit or said stored units at least one of: (a) an output channel to be used in communicating said received at least on unit or said stored units and (b) an approximate time for communicating to the subscriber said received at least one unit or said stored units and communicating one unit of said received unit or said stored units from said station to at least one of said subscriber in response to said step of identifying and according to said programming schedule. Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any

schedule that designates as Applicants claim in order to communicate programming to a subscriber.

With respect to Applicants' **claim 31**, Young fails to teach, *inter alia*, receiving a programming schedule designating for said received at least one unit or said stored units at least one of: (a) an output channel to be used in communicating said received at least on unit or said stored units and (b) an approximate time for communicating to the subscriber said received at least one unit or said stored units and communicating one unit of said received unit or said stored units from said station to at least one of said subscriber in response to said step of identifying and according to said programming schedule. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for communicating programs to subscribers.

With respect to Applicants' **claim 31**, Hetrich fails to teach, *inter alia*, the communication of television programming. Hetrich is drawn to a method and system for transmitting control signals to in a network of radio stations. Although, radio networks and television networks both utilize transmission systems, Applicants clearly claim transmitting television programming which the radio network of Hetrich simply can not anticipate, suggest, describe, or make obvious. Therefore, Hetrich is silent as to receiving at least one unit of said television programming from a remote programming source and storing a plurality of units of said television programming on a local programming source.

Further, Hetrich is completely silent as to receiving a programming schedule designating for said received at least one unit or said stored units at least one of: (a) an output channel to be used in communicating said received at least on unit or said stored units and (b) an approximate time for communicating to the subscriber said received at least one unit or said stored units and communicating one unit of said received unit or said stored units from said station to at least one of said subscriber in response to said step of identifying and according to said programming schedule. Applicants' programming schedule is clearly used in designating features for communicating television programming. Therefore, Hetrich is utterly silent as to Applicants' claimed programming schedule and communicating television programming based on the schedule. Further, although, Hetrich uses control signals to stop audio recorders to record special programs, to accomplish switching of local and network programs, and to interrupt programming, there is no suggestion of receiving a programming schedule. Further, the control signals are in use with controlling various functions as related to radio programs and not television programs. Applicants submit that not only is Hetrich silent as to television programming, Hetrich is utterly silent as to a programming schedule the designates as related to television programming and as Applicants claim in order to communicate the television programming.

Further, in general, Kamishima, Germany, and Skilton have been used as secondary references in various combinations with Haselwood '851, Hetrich, and Young. Kamishima teaches a monitoring device of a switcher system used in a TV station. Germany teaches inserting cueing signals into network programming. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Haselwood '851, Hetrich, and Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and

communicating programming based on the schedule. Therefore, combining the primary references with any one of Kamishima, Germany, or Skilton still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

e. Claim 40

Claims 5 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 40**, Beck fails to teach, *inter alia*, receiving a programming schedule designating for each of a plurality of said received units at least one of:
(a) an output channel to be used in communicating the selected unit and (b) a time said selected unit is to be communicated to said subscriber and communicating the selected unit from said station to at least one said subscriber according to the programming schedule. Instead, beck teaches inputting a programming schedule stored in a floppy diskette into an on-line automation system for control of switching and machine functions. Beck is silent as to receiving a programming schedule at a computer and communicating programming based on the computer received programming schedule. Although, beck teaches a schedule that designates program titles, channel, broadcast time and date, there is no suggestion of receiving such at a computer in order to communicate the programming. The schedule in Beck is simply used by an on-line automation system to control switching and machine functions.

With respect to Applicants' **claim 40**, Young fails to teach, *inter alia*, receiving a programming schedule designating for each of a plurality of said received units at least one of:
(a) an output channel to be used in communicating the selected unit and (b) a time said selected unit is to be communicated to said subscriber and communicating the selected unit from said

station to at least one said subscriber according to the programming schedule. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for communicating programs to subscribers.

Further, in general, Haselwood '851, Germany, and Hetrich have been used as secondary references in various combinations with Beck and Young. Haselwood '851 teaches a monitoring system for monitoring broadcasts of various network affiliates. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck and Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and selecting and communicating programming based on the schedule. Therefore, combining the primary references with any one of Haselwood '851, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

f. Claim 56

Claims 5 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 56**, Beck fails to teach, *inter alia*, receiving at the computer a programming schedule that designates, for said loaded at least one unit or said received at least one unit , at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to a subscriber and selecting one of said loaded or said received at least one unit , based on said programming schedule, for communication from: (a) said received at least one unit received by said station from the remote source and (b) said loaded at least one unit loaded onto the local source and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging and step of communicating the selected unit. Instead, beck teaches inputting a programming schedule stored in a floppy diskette into an on-line automation system for control of switching and machine functions. Beck is silent as to receiving a programming schedule at a computer and selecting then communicating programming based on the computer received programming schedule. Although, beck teaches a schedule that designates program titles, channel, broadcast time and date, there is no suggestion of receiving such at a computer in order to communicate the programming. The schedule in Beck is simply used by an on-line automation system to control switching and machine functions.

With respect to Applicants' **claim 56**, Haselwood '851 fails to teach, *inter alia*, receiving at the computer a programming schedule that designates, for said loaded at least one unit or said received at least one unit , at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to a subscriber and selecting one of said loaded or said received at least one unit , based on said programming schedule, for communication from: (a) said received at least one unit received by said station from the remote source and (b) said loaded at least one unit loaded onto the local source and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging and step of

communicating the selected unit. Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to select and communicate programming to a subscriber and to log the communication.

With respect to Applicants' **claim 56**, Young fails to teach, *inter alia*, receiving at the computer a programming schedule that designates, for said loaded at least one unit or said received at least one unit , at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to a subscriber and selecting one of said loaded or said received at least one unit , based on said programming schedule, for communication from: (a) said received at least one unit received by said station from the remote source and (b) said loaded at least one unit loaded onto the local source and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging and step of communicating the selected unit. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for selecting and communicating programs to subscribers in order to log the communication.

With respect to Applicants' **claim 56**, Tunmann fails to teach, *inter alia*, receiving at the computer a programming schedule that designates, for said loaded at least one unit or said received at least one unit , at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to a subscriber and selecting one of said loaded or said received at least one unit , based on said programming schedule, for communication from: (a) said received at least one unit received by said station from the remote source and (b) said loaded at least one unit loaded onto the local source and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging and step of communicating the selected unit. Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a programming schedule as well as communicating programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference.

However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule or the selecting and communicating steps. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

g. Claim 62

Claims 5 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 62**, Beck fails to teach, *inter alia*, receiving a programming schedule that designates for at least one unit of said received units or said stored unit at least one of: (a) an output channel to be used in communicating and (b) a time for communicated to the subscriber and selecting one of said received units or said stored at least one unit for communication from: (a) said received units received from the remote source but which are not stored at said station and (b) said stored at least one unit and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging said step of communicating. Instead, beck teaches inputting a programming schedule stored in a floppy diskette into an on-line automation system for control of switching and machine functions. Beck is silent as to receiving a programming schedule at a computer and selecting then communicating programming based on the computer received programming schedule. Although, beck teaches a schedule that designates program titles, channel, broadcast time and date, there is no suggestion of receiving such at a computer in order to select then

communicate the programming. The schedule in Beck is simply used by an on-line automation system to control switching and machine functions.

With respect to Applicants' **claim 62**, Haselwood '851 fails to teach, *inter alia*, receiving a programming schedule that designates for at least one unit of said received units or said stored unit at least one of: (a) an output channel to be used in communicating and (b) a time for communicated to the subscriber and selecting one of said received units or said stored at least one unit for communication from: (a) said received units received from the remote source but which are not stored at said station and (b) said stored at least one unit and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging said step of communicating. Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to select and communicate programming to a subscriber and to log the communication in the manner as claimed by Applicants.

With respect to Applicants' **claim 62**, Young fails to teach, *inter alia*, receiving a programming schedule that designates for at least one unit of said received units or said stored unit at least one of: (a) an output channel to be used in communicating and (b) a time for communicated to the subscriber and selecting one of said received units or said stored at least one unit for communication from: (a) said received units received from the remote source but which are not stored at said station and (b) said stored at least one unit and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging said step of communicating. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se.

Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for selecting and communicating programs to subscribers in order to log the communication in the manner as claimed by Applicants.

With respect to Applicants' **claim 62**, Tunmann fails to teach, *inter alia*, receiving a programming schedule that designates for at least one unit of said received units or said stored unit at least one of: (a) an output channel to be used in communicating and (b) a time for communicated to the subscriber and selecting one of said received units or said stored at least one unit for communication from: (a) said received units received from the remote source but which are not stored at said station and (b) said stored at least one unit and communicating said selected unit from said station to at least one said subscriber according to said programming schedule and logging said step of communicating. Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a programming schedule as well as communicating programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule or the selecting and communicating steps. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

h. Claim 63

Claims 63 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 63**, Beck fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for at least one unit of said received unit or said stored units at least one of: (a) a time for communication to the subscriber and (b) an output channel to be used in communicating to the subscriber and selecting one unit of said received unit or said stored units based on said programming schedule and communicating the selected unit from the switch output to the subscriber over said output channel according to the programming schedule and logging said step of communicating. Instead, Beck teaches inputting

a programming schedule stored in a floppy diskette into an on-line automation system for control of switching and machine functions. Beck is silent as to receiving a programming schedule at a computer and selecting then communicating programming based on the computer received programming schedule. Although, Beck teaches a schedule that designates program titles, channel, broadcast time and date, there is no suggestion of receiving such at a computer in order to select then communicate the programming. The schedule in Beck is simply used by an on-line automation system to control switching and machine functions.

With respect to Applicants' **claim 63**, Haselwood '851 fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for at least one unit of said received unit or said stored units at least one of: (a) a time for communication to the subscriber and (b) an output channel to be used in communicating to the subscriber and selecting one unit of said received unit or said stored units based on said programming schedule and communicating the selected unit from the switch output to the subscriber over said output channel according to the programming schedule and logging said step of communicating. Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to select and communicate programming to a subscriber and to log the communication.

With respect to Applicants' **claim 63**, Young fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for at least one unit of said received unit or said stored units at least one of: (a) a time for communication to the subscriber and (b) an output channel to be used in communicating to the subscriber and selecting one unit of said received unit or said stored units based on said programming schedule and communicating the selected

unit from the switch output to the subscriber over said output channel according to the programming schedule and logging said step of communicating. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for selecting and communicating programs to subscribers in order to log the communication.

With respect to Applicants' **claim 63**, Tunmann fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for at least one unit of said received unit or said stored units at least one of: (a) a time for communication to the subscriber and (b) an output channel to be used in communicating to the subscriber and selecting one unit of said received unit or said stored units based on said programming schedule and communicating the selected unit from the switch output to the subscriber over said output channel according to the programming schedule and logging said step of communicating. Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is

silent as to a programming schedule as well as communicating programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule or the selecting, and communicating steps. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

i. Claim 65

Claims 65 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 65**, Haselwood '851 fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for at least one of said stored units at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and communicating the selected unit from the switch output to

the subscriber according to the programming schedule and logging the step of communicating.

Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to communicate programming to a subscriber and to log the communication.

With respect to Applicants' **claim 65**, Young fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for at least one of said stored units at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and communicating the selected unit from the switch output to the subscriber according to the programming schedule and logging the step of communicating. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for communicating programs to subscribers in order to log the communication.

With respect to Applicants' **claim 65**, Tunmann fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for at least one of said stored units at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the

subscriber and communicating the selected unit from the switch output to the subscriber according to the programming schedule and logging the step of communicating. Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of *receiving* a programming schedule at a computer that designates for programming or stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a receiving programming schedule at a computer as well as communicating programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and communicating. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and

in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

j. Claim 68

Claims 68 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 68**, Haselwood '851 fails to teach, *inter alia*, receiving at a computer a programming schedule that designates for one or more units of said stored units or said received units at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and selecting one unit of said stored units or said received units based upon at least one of said received signals and communicating said selected unit to the subscriber at the time or on the channel designated by said programming schedule.

Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to select and communicate programming to a subscriber and to log the communication.

With respect to Applicants' **claim 68**, Young fails to teach, *inter alia*, receiving at a computer a programming schedule that designates for one or more units of said stored units or said received units at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and selecting one unit of said stored units or said received units based upon at least one of said received signals and communicating said selected unit to the subscriber at the time or on the channel designated by said programming schedule.

Although Young teaches a log of programming, there is no suggestion of a receiving at a

computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for selecting and communicating programs to subscribers in order to log the communication.

With respect to Applicants' **claim 68**, Tunmann fails to teach, *inter alia*, receiving at a computer a programming schedule that designates for one or more units of said stored units or said received units at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and selecting one unit of said stored units or said received units based upon at least one of said received signals and communicating said selected unit to the subscriber at the time or on the channel designated by said programming schedule.

Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a programming schedule as well as communicating programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and communicating. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

k. Claim 72

Claim 72 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 72**, Hetrich fails to teach, *inter alia*, the communication of units of television programming to a subscriber. Instead, Hetrich is drawn to a method and system for transmitting control signals to in a network of radio stations. Although, radio networks and television networks both utilize transmission systems, Applicants clearly claim transmitting television programming which the radio network of Hetrich simply can not anticipate, suggest, describe, or make obvious. Therefore, Hetrich is silent as to receiving a

plurality of units of said television programming from a remote programming source and selecting one of said received units in response to one of said signals and determining, based on said one signal, whether said selected unit should be retransmitted to the subscriber immediately or whether said selected unit should be stored on a local programming source for delayed communication to the subscriber and storing said selected unit on the local source if, based upon said step of determining, said selected unit should be stored for said delayed communication.

Further, Hetrich is completely silent as to receiving a programming schedule that designates for some of said received units at least one of: (a) an output channel to be used in communicating and (b) a time for communication to the subscriber and communicating, at the time or on the output channel designated by said programming schedule, said selected unit from the local source to the subscriber if the selected unit is stored on the local source and logging the step of communicating to the subscriber. Applicants' programming schedule is clearly used in designating features for communicating television programming. Therefore, Hetrich is utterly silent as to Applicants' claimed programming schedule and communicating television programming based on the schedule. Further, although, Hetrich uses control signals to stop audio recorders to record special programs, to accomplish switching of local and network programs, and to interrupt programming, there is no suggestion of receiving a programming schedule. Further, the control signals are in use with controlling various functions as related to radio programs and not television programs. Applicants submit that not only is Hetrich silent as to television programming, Hetrich is utterly silent as to a programming schedule the designates as related to television programming and as Applicants claim in order to communicate the television programming and log the communication.

With respect to Applicants' **claim 72**, Young fails to teach, *inter alia*, determining, based on said one signal, whether said selected unit should be retransmitted to the subscriber immediately or whether said selected unit should be stored on a local programming source for

delayed communication to the subscriber and storing said selected unit on the local source if, based upon said step of determining, said selected unit should be stored for said delayed communication. There is no concept in Young of delayed communication to a subscriber as determined base on a received signal. Therefore, Young is silent as to Applicants' step of determining and storing.

Further, Young fails to suggest or describe receiving a programming schedule that designates for some of said received units at least one of: (a) an output channel to be used in communicating and (b) a time for communication to the subscriber and communicating, at the time or on the output channel designated by said programming schedule, said selected unit from the local source to the subscriber if the selected unit is stored on the local source and logging the step of communicating to the subscriber. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for communicating programs to subscribers in order to log the communication.

Further, in general, Haselwood '851 and Germany have been used as secondary references in various combinations with Hetrich and Young. Haselwood '851 teaches a monitoring system for monitoring broadcasts of various network affiliates. Germany teaches inserting cueing signals into network programming. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Hetrich and Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed

programming schedule and selecting and communicating programming based on the schedule. Therefore, combining the primary references with any one of Haselwood '851 or Germany still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

I. Claim 75

Claim 75 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 75**, Haselwood '851 fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for said stored unit at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and outputting said stored unit and said unit identification signal from the local source at the time or onto the output channel designated by said programming schedule and communicating at least said outputted stored unit and said outputted unit identification signal to the subscriber and logging said step of communicating based upon said step of detecting.

Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to output and communicate programming to a subscriber and to log the communication.

With respect to Applicants' **claim 75**, Young fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for said stored unit at least one of: (a) an

output channel to be used in communicating and (b) a time for communicating to the subscriber and outputting said stored unit and said unit identification signal from the local source at the time or onto the output channel designated by said programming schedule and communicating at least said outputted stored unit and said outputted unit identification signal to the subscriber and logging said step of communicating based upon said step of detecting. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for outputting and communicating programs to subscribers in order to log the communication.

With respect to Applicants' **claim 75**, Tunmann fails to teach, *inter alia*, receiving at the computer a programming schedule that designates for said stored unit at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and outputting said stored unit and said unit identification signal from the local source at the time or onto the output channel designated by said programming schedule and communicating at least said outputted stored unit and said outputted unit identification signal to the subscriber and logging said step of communicating based upon said step of detecting. Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered

information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a programming schedule as well as communicating programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule or the outputting and communicating steps. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

m. Claim 78

Claim 78 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 78**, Haselwood '851 fails to teach, *inter alia*, receiver operatively connected to a first input of the switch and said local source operatively connected to

a second input of the switch. Haselwood '851 teaches a network including a television camera 10 with feed line 16, network outlet 18 with transmitter 42 and local program source 44. However, Haselwood '851 is silent as to any switch that functions as claimed. Haselwood '851 is also silent as to a receiver connected to a first input of a switch and a local source connected to a second input of a switch.

Haselwood '851 also fails to suggest or describe scheduling, for communication, one of said stored units and selecting at least one unit of said received unit or said stored units based on the received signal and identifying the first or second input connected to the selected unit. Haselwood '851 has no concept of scheduling in its disclosure. Haselwood '851 does include coding that indicates the start of a message signal, but there is no teaching of scheduling. Further, Haselwood '851 is silent as to selecting received or stored programs based on any received signal. Further, Haselwood '851 is clearly silent as to identifying first and second switch outputs, since there is no teaching of a switch in Haselwood '851.

Further, Haselwood '851 is silent as to communicating a switch control signal from the computer to the switch and configuring the switch in response to said switch control signal to transfer the selected unit from the identified switch input to a switch output and communicating said selected unit from said switch output to the subscriber. As stated, Haselwood '851 is silent as to any switch that functions as Applicants clam. Therefore, Haselwood '851 is utterly silent as to a computer that communicates a control signal to the switch for configuring. Therefore, Haselwood '851 is silent as to communicating programming from a switch input.

With respect to Applicants' **claim 78**, Young fails to teach, *inter alia*, receiving at a receiver a signal from the remote programming source, the receiver operatively connected to a first input of the switch and selecting at least one unit of said received unit or said stored units based on the received signal and configuring the switch in response to said switch control signal to transfer the selected unit from the identified switch input to a switch output and communicating said selected unit from said switch output to the subscriber. Although, Young teaches a system having a switch, there is no suggestion that the switch is connected to a

receiver. Instead, Young clearly illustrates that the switch is connected to various program source equipment. There is no disclosure of a switch connected to a receiver that receives a signal. Therefore, there is no suggestion of selecting a received or stored unit of programming based on a signal received from a receiver that is connected to the switch and configuring a switch to transfer the selected unit for communicating.

With respect to Applicants' **claim 78**, Tunmann fails to teach, *inter alia*, receiving at a receiver a signal from the remote programming source, the receiver operatively connected to a first input of the switch and storing a plurality of units of said programming onto a local programming source located at said station, said local source operatively connected to a second input of the switch and selecting at least one unit of said received unit or said stored units based on the received signal and configuring the switch in response to said switch control signal to transfer the selected unit from the identified switch input to a switch output and communicating said selected unit from said switch output to the subscriber. Although, Tunmann teaches a microprocessor that is programmed by time slots in order to control selecting of programs from sources with the use of a switch, there is no suggestion of a switch connected to a receiver that receives a signal and a local programming source for storing programming. Further, Tunmann is silent as to selecting received or stored programming based on a received signal from a receiver, since Tunmann clearly fails to teach a switch connected to a receiver. Tunmann clearly teaches a system with switching capabilities. However, there is no suggestion of configuring the switch in response to a switch control signal in order to transfer selected programming (based on a signal received from a receiver that is connected to a switch) and communicating said selected programming from said switch output to the subscriber.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV

programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or “que’s” to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants’ claimed invention. There is no discussion of how Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants’ claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants’ claimed programming schedule and communicating. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants’ claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants’ claimed invention, as so stated.

n. Claim 79

Claim 79 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants’ **claim 79**, Young fails to teach, *inter alia*, receiving a programming schedule designating for at least one unit of said received unit or said stored unit at least one of: (a) an output channel to be used in communicating and (b) a time for communicating to the subscriber and communicating the selected unit from the at least one switch output to the subscriber, said selected unit being communicated with a unit identification signal and according to said programming schedule, said unit identification signal identifying the selected unit and logging said step of communicating, said step of logging comprises the steps of: (a) detecting the unit identification signal during said step of communicating and (b) creating a record evidencing said step of communicating based on said step of detecting the unit identification signal. Although Young teaches a log of programming, there is no suggestion of a

receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim for outputting and communicating programs to subscribers in order to log the communication.

Further, in general, Haselwood '851 and Hetrich have been used as secondary references in various combinations with Young. Haselwood '851 teaches a monitoring system for monitoring broadcasts of various network affiliates. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Young or the combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and selecting and communicating programming based on the schedule. Therefore, combining the primary references with any one of Haselwood '851 or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

o. Claim 83

Claim 83 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 83**, Beck fails to teach, *inter alia*, said computer having access to a programming schedule, the programming schedule designating for at least one unit of said received units or said stored units at least one of: (a) a time to communicate to the subscriber and (b) one of said one or more output channels to be used for communicating to the subscriber and said computer programmed to perform the following steps: (a) selecting each said unit of said received units or said stored units designated by said programming schedule from said received units and said stored units and (b) configuring said switch and controlling said storage device to communicate said selected units to the subscriber according to said programming schedule. Instead, Beck teaches inputting a programming schedule stored in a floppy diskette into an on-line automation system for control of switching and machine functions. Beck is silent as to receiving a programming schedule that designated stored programming as well as the computer selecting programming, configuring a switch and communicating programming based on the computer received programming schedule. Although, Beck teaches a schedule that designates program titles, channel, broadcast time and date, there is no suggestion of receiving such at a computer in order to communicate the programming. The schedule in Beck is simply used by an on-line automation system to control switching and machine functions.

With respect to Applicants' **claim 83**, Haselwood '851 fails to teach, *inter alia*, a switch having inputs operatively connected to said receiver and said storage device, said switch having one or more outputs operatively connected to one or more output channels. Haselwood '851 teaches a network including a television camera 10 with feed line 16, network outlet 18 with transmitter 42 and local program source 44. However, Haselwood '851 is silent as to any switch that functions or is connected as claimed. Therefore, Haselwood '851 is also silent as to a receiver and storage device connected to a switch and a switch having one or more outputs connected to output channels, as so claimed.

Further, Haselwood '851 fails to suggest or describe a computer having access to a programming schedule, the programming schedule designating for at least one unit of said

received units or said stored units at least one of: (a) a time to communicate to the subscriber and (b) one of said one or more output channels to be used for communicating to the subscriber and said computer programmed to perform the following steps: (a) selecting each said unit of said received units or said stored units designated by said programming schedule from said received units and said stored units and (b) configuring said switch and controlling said storage device to communicate said selected units to the subscriber according to said programming schedule. Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order to cause a computer to select, configure and communicate programming to a subscriber and to log the communication.

With respect to Applicants' **claim 83**, Young fails to teach, *inter alia*, said computer having access to a programming schedule, the programming schedule designating for at least one unit of said received units or said stored units at least one of: (a) a time to communicate to the subscriber and (b) one of said one or more output channels to be used for communicating to the subscriber and said computer programmed to perform the following steps: (a) selecting each said unit of said received units or said stored units designated by said programming schedule from said received units and said stored units and (b) configuring said switch and controlling said storage device to communicate said selected units to the subscriber according to said programming schedule. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the

event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim causing a computer to selecting, configure, and communicating programs to subscribers in order to log the communication.

With respect to Applicants' **claim 83**, Tunmann fails to teach, *inter alia*, said computer having access to a programming schedule, the programming schedule designating for at least one unit of said received units or said stored units at least one of: (a) a time to communicate to the subscriber and (b) one of said one or more output channels to be used for communicating to the subscriber and said computer programmed to perform the following steps: (a) selecting each said unit of said received units or said stored units designated by said programming schedule from said received units and said stored units and (b) configuring said switch and controlling said storage device to communicate said selected units to the subscriber according to said programming schedule. Tunmann teaches an operator implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or stored programming either an output channel or a time that the programming is to be communicated. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a programming schedule as well as controlling a computer to select, configure switches, and communicate programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule or computer that selects, configures, and communicates. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

p. Claim 84

Claim 84 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over the following references, as discussed in detail below.

With respect to Applicants' **claim 84**, Beck fails to teach, *inter alia*, said computer programmed to perform the following steps for each unit of said stored units designated in the programming schedule: (a) identifying one of said storage devices storing the designated unit (b) configuring said switch and controlling said storage device to output the designated unit with its unit identification signal and (c) communicating the outputted unit to the subscriber according to the programming schedule and (d) logging the communication of said outputted unit based on information or data provided by the signal detector. Instead, beck teaches inputting a programming schedule stored in a floppy diskette into an on-line automation system

for control of switching and machine functions. Beck is silent as to receiving a programming schedule that designated stored programming as well as the computer identifying the storage device, configuring the switch and controlling the storage device, and communicating programming based on the computer received programming schedule. Although, Beck teaches a schedule that designates program titles, channel, broadcast time and date, there is no suggestion of receiving such at a computer in order to communicate the programming. The schedule in Beck is simply used by an on-line automation system to control switching and machine functions. Further, although, Beck teaches a printer for automatic log preparation, the logging is not based on information or data provided by a signal detector nor is the logging in response to communicating in the manner as claimed by Applicants.

With respect to Applicants' **claim 84**, Haselwood '851 fails to teach, *inter alia*, a switch having inputs connected to said storage devices, said switch having one or more outputs operatively connected to one or more output channels. Haselwood '851 teaches a network including a television camera 10 with feed line 16, network outlet 18 with transmitter 42 and local program source 44. However, Haselwood '851 is silent as to any switch that functions or is connected as claimed. Therefore, Haselwood '851 is also silent as to a storage device connected to a switch and a switch having one or more outputs connected to output channels, as so claimed.

Further, Haselwood '851 fails to suggest or describe a computer programmed to perform the following steps for each unit of said stored units designated in the programming schedule: (a) identifying one of said storage devices storing the designated unit (b) configuring said switch and controlling said storage device to output the designated unit with its unit identification signal and (c) communicating the outputted unit to the subscriber according to the programming schedule and (d) logging the communication of said outputted unit based on information or data provided by the signal detector. Instead, Haselwood '851 teaches that a monitoring station 24 which has a clock 34 that generates a time base for mini-computer to provide an elapsed time indication and a real time clock at central office computer 34 provides a time reference for the elapsed time reading generated by clock 34. Therefore, Haselwood '851 can ascertain the time

the program was received and the duration of the program. However, such time is done after the subscriber has received and viewed the programming, which is in direct contrast to Applicants' claimed programming schedule. Haselwood '851 fails to suggest any schedule that designates as Applicants claim in order cause a computer to identify, configure, communicate and log.

With respect to Applicants' **claim 84**, Young fails to teach, *inter alia*, said computer programmed to perform the following steps for each unit of said stored units designated in the programming schedule: (a) identifying one of said storage devices storing the designated unit (b) configuring said switch and controlling said storage device to output the designated unit with its unit identification signal and (c) communicating the outputted unit to the subscriber according to the programming schedule and (d) logging the communication of said outputted unit based on information or data provided by the signal detector. Although Young teaches a log of programming, there is no suggestion of a receiving at a computer a programming schedule per se. Instead, Young teaches that the cards which are read into memory are represented by a horizontal row on the log monitor. The columns on the log monitor contain the scheduled one air time of events and the duration of the event in minutes and seconds. However, there is no suggestion of a schedule that designates either an output channel or an approximate time for communicating to a subscriber. Therefore, even though Young airs programs based on the log, there is no programming schedule that is received at a computer and designates as Applicants claim causing a computer to identify, configure, communicate and log.

With respect to Applicants' **claim 84**, Tunmann fails to teach, *inter alia*, said computer programmed to perform the following steps for each unit of said stored units designated in the programming schedule: (a) identifying one of said storage devices storing the designated unit (b) configuring said switch and controlling said storage device to output the designated unit with its unit identification signal and (c) communicating the outputted unit to the subscriber according to the programming schedule and (d) logging the communication of said outputted unit based on information or data provided by the signal detector. Tunmann teaches an operator

implemented switching program in order to control the selection of a channel for distribution from a number of available off air signals on a scheduled basis. There is no concept of receiving a programming schedule at a computer that designates for programming or stored programming. Instead, Tunmann simply teaches manually entering programming by time slot. The entered information includes day of week, hour of day, half-hour, and switch position and condition. Tunmann is silent as to a programming schedule as well as controlling a computer to identify, configure switches, and communicate designated programming based on a programming schedule that functions as claimed. Tunmann merely switches between channels based on a schedule that indicates day, hour, and switch characteristics. Further, since Tunmann is silent as to communicating, Tunmann is utterly silent as to logging as claimed by Applicants.

Further, in general, Skilton, Germany, and Hetrich have been used as secondary references in various combinations with Beck, Haselwood '851, Tunmann, and Young. Skilton teaches automatic control systems which are used to automate the selection and transmission of TV programming. Germany teaches inserting cueing signals into network programming. Hetrich teaches a system for transmitting control signals or "que's" to the member stations of a network of radio stations. The office action has given a detailed summary of each reference. However, the office action has failed to explain how the various combinations of the references make obvious Applicants' claimed invention. There is no discussion of how Beck, Haselwood '851, Tunmann, Young, or their combinations meet each and every one of Applicants' claimed limitations. Further, as stated above none of the primary references suggest or describe Applicants' claimed programming schedule and the computer's functioning based on the programming schedule. Therefore, combining the primary references with any one of Skilton, Germany, or Hetrich still fails to adequately describe Applicants' claimed invention. Further, Applicants have reviewed all the references alone and in combination and submit that not only is

there no suggestion to combine the references, the combination fails to teach Applicants' claimed invention, as so stated.

q. Dependent claims

Claims 2, 3, 6-9, 11, 13, 16-19, 22, 23, 32-39, 42, 44, 49-55, 57-61, 64, 66, 67, 69-71, 73, 74, 76, 77, 80-82, and 85 depends upon any one of independent claims 5, 10, 20, 31, 40, 56, 62, 63, 65, 68, 72, 75, 78, 83, and 84. As discussed *supra*, each prior art reference and the combinations thereof fails to disclose every element of claims 5, 10, 20, 31, 40, 56, 62, 63, 65, 68, 72, 75, 78, 83, and 84, and thus, *ipso facto*, each prior art reference and the combinations thereof fails to suggest or describe dependent claims 2, 3, 6-9, 11, 13, 16-19, 22, 23, 32-39, 42, 44, 49-55, 57-61, 64, 66, 67, 69-71, 73, 74, 76, 77, 80-82, and 85, and therefore, this rejection should be withdrawn and the claim be permitted to issue. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

3. Traversal of 103 rejection on the grounds of being an improper rejection

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of the claims be withdrawn. The office action has made the following rejections:

- Claim 10, 40, 42, 56, 62, 63, 83, and 84 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Beck;
- Claim 2, 3, 5, 8-11, 13, 16, 18, 19, 49, 50-52, 56-71, 75-78, and 80-84 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Haselwood '851 in view Young;
- Claim 7 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Haselwood '851 in view of Young, further in view of Tunmann.
- Claims 20, 22, and 23 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Haselwood '851 in view of Young, further in view Kamishima.

- Claim 31, 50, 51, 53, 55, and 82 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Haselwood '851 in view of Young and Skilton, further in view of Kamishima.
- Claims 2, 3, 5, 8-11, 13, 19, 31, 50-52, 53, 55-71, 75-78, and 80-84 rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tunmann in view of Young and Skilton.
- Claim 16 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tunmann in view of Young, Skilton, and Haselwood '851.
- Claims 31-35, 39, 72-74, 81, and 82 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Hetrich in view of Young.
- Claims 31, 65, 78, and 79 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Young in view of Germany.
- Claims 2-16, 18-35, 37-53, and 55-84 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Young and Germany, further in view of Hetrich.

However, the office action has failed to adequately reject each claim as required by the MPEP. For example, the office action gives a brief summary of each reference, but fails to explain how each reference anticipates or makes obvious each of Applicants' claimed limitations in each rejected claim. Applicants submit that the majority of the Office actions numerous 103 rejections fail to meet the basic criteria for a proper 103 rejection.

"After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office Action (1) the relevant teachings of the prior art relied upon, preferably with reference to the relevant columns or page number(s) and line number(s) where appropriate, (2) the difference or differences in the claim over the applied reference(s), (3) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (4) an explanation why..." MPEP 706.02(j)

Further, several claim rejections have improperly cited "further in view of" without proper reference to a previous rejection (see rejection of claims 2-16, 18-35, 37-53, and 55-84, further in view of Hetrich) as outlined in the MPEP 7.22. Therefore, Applicants request

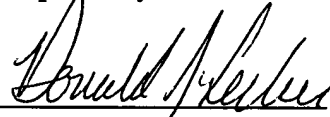
withdrawal of the rejection, in light of Applicants traversal of the prior art and the improper nature of the 103 rejections.

III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such informalities.

Respectfully submitted,



Thomas J. Scott, Jr.
Reg. No. 27,836
Donald J. Lecher
Reg. No. 41,933
Attorney for Applicants
Tel: (202) 383-6790

Date: February 4, 1999
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004